

DOCKET FILE COPY ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

RECEIVED
OCT 17 1997
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)

Federal-State Joint Board on)
Universal Service)

CC Docket No. 96-45

Forward-Looking Mechanism)
for High Cost Support for)
Non-Rural LECs)

CC Docket No. 97-160

COMMENTS OF
ALIENT COMMUNICATIONS CO.

Robert A. Mazer
Albert Shuldiner
Allison S. Yamamoto
Vinson & Elkins L.L.P.
1455 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-1008
(202) 639-6755
Counsel for Aliant Communications Co.

October 17, 1997

**COMMENTS OF
ALIENT COMMUNICATIONS CO.**

TABLE OF CONTENTS

III.B.3	Hybrid Models	2
III.C.2.b.	Installation and Cable Cost	2
III.C.2.d.	Structure Sharing	3
III.C.2.e.	Loop Design	4
III.C.2.g.	Miscellaneous Outside Plant Input Value Issues	5
III.C.4	Interoffice Trunking, Signaling, Local Tandem Investment	6
III.C.5	General Support Facilities	7
III.C.7.a.	Expenses in General	7
III.C.7.b.	Plant Specific Expenses	8
III.C.7.c.	Plant Non-Specific Expenses	8
III.C.7.d.	Customer Services	9
III.C.8	Other	9
III.D.	Support Areas	9
IV.	Support For Local Usage	10

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
Federal-State Joint Board on)	CC Docket No. 96-45
Universal Service)	
)	
Forward-Looking Mechanism)	CC Docket No. 97-160
for High Cost Support for)	
Non-Rural LECs)	

**COMMENTS
OF
ALIENT COMMUNICATIONS CO.**

Aliant Communications Company ("Aliant"), by its attorneys, hereby submits its comments in the above-captioned proceedings.¹ These comments address the platform design for general support facilities, expenses, and other support areas (III.C.5, 7, 8 & III.D) and all inputs (III.B.3 & III.C), as well as support for local usage (IV.) as requested in the comment submission schedule of the Commission's Further Notice of Proposed Rulemaking ("FNPRM"). In order to facilitate the Commission's consideration of these comments, Aliant references the particular sections of the Commission's FNPRM to which they relate.

¹ *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45 and *Forward-Looking Mechanism for High Cost Support for Non-Rural LECs*, CC Docket No. 97-160, FCC No. 97-256, *Further Notice of Proposed Rulemaking* (July 18, 1997).

III.B.3 Hybrid Models

It is Aliant's view that a single, universally accepted model which supports both the Universal Service Fund ("USF") and Unbundled Network Elements ("UNEs") would be desirable. Comments on the technical considerations concerning model merging should be entrusted to the developers.

III.C.2.b Installation and Cable Cost

Both the Hatfield 4.0 and BCPM models construct "conduit systems" from the lowest density to the highest density zones. The definition of what constitutes a "system" is only implied by the cost variances between the density zones required to construct the conduit. The models' requirements for placement of multiple large copper feeder cables in the higher density zones will necessitate the model to construct an associated multi-duct conduit support structure.

A multi-duct conduit support structure must be properly constructed to sustain the stresses associated with pulling in large heavy copper cables. Maintaining alignment of a multi-duct system will require more labor than placing a single duct in the uneven base of a narrow trench in a low density area. Multiple duct systems will also require a wider trench to minimize the stacking of individual conduit cells. Aliant has concerns that the discounted trench and boring cost default inputs in the higher density zones do not reflect the actual cost to build multi-duct conduit systems.

There are several other factors that can have an effect on conduit cost that are not necessarily sensitive to density zones. In a localized, smaller contractor market, the cost of contractor labor will be dependent on market conditions that at times can drive prices higher. A company in a climate that experiences seasonal construction cycles will have more competition for contractors during the peak

Aliant Communications Co.

October 17, 1997

Page 3

summer months, which can result in a significant increase in labor costs. During the winter months, when there is less competition in the contractor labor market, the cost to excavate in frozen terrain will escalate pricing units. Conduit cost can also be affected by the necessity of working around existing utilities, which can result in increased costs due to transposing and maintaining conduit alignment. This effect on conduit cost is not necessarily dependent on density zones.

III.C.2.d Structure Sharing

Aliant agrees that sharing for cable plowing will be minimal, and that the model should assign 100 percent of the costs to the telephone company. Though the technology exists for direct plowing of power cables, additional precautions must be taken to not stress the power cable, which could potentially shorten the cable life. Also, the National Electric Safety Code requires the utility to install this cable at a minimum depth of 48 inches. These factors will drive the unit cost of joint-cable plowing higher, and may not afford a significant savings. This is consistent with Aliant's comments regarding the coordination/sharing of joint trenches. Sharing is not as simple as dividing a non-joint construction unit by the number of sharing parties.

The suggested aggregate default of a single value assigned to all other shared facilities is an oversimplification of the sharing (or non-sharing) that exists in the various types of support structure across all the density zones. The sharing of a distribution trench in a medium-density residential subdivision would not be the same as the sharing of a trench for an aerial pole line in a low-density rural zone, or the installation of a multi-duct conduit system in a high-density zone. Additionally, it is not economical to extend cable television services into remote rural areas. As a result, there will

be minimal sharing by cable providers in the low-density zones. Theoretically, sharing of joint trench assumes that all parties are on-site with equipment and materials ready for joint installation of facilities. In reality, the joint placement of facilities requires additional time for engineering and coordination, and will almost always require additional time to actually install a foot of telephone cable. Consequently, joint sharing of a trench will actually result in a higher unit labor cost for the installation of the telephone cable.

III.C.2.e Loop Design

(1) Digital Loop Carriers

Digital Loop Carrier ("DLC") costs can fluctuate significantly from company to company due to several factors, but the primary pricing factor is a function of volume purchases. Larger companies can have a substantially lower investment per DLC site than smaller companies. The range of inputs can therefore fluctuate from company to company. The models need to take this pricing variance into consideration by allowing company dependent input of the major pricing variables in DLC costs.²

III.C.2.g Miscellaneous Outside Plant Input Value Issues

(1) Manholes

As stated in Aliant's comments filed in this proceeding on September 24, 1997, Aliant believes that both the Hatfield and BCPM models do not contain sufficient variable inputs to accurately construct a manhole and to estimate the associated cost. If the platforms are corrected for these deficiencies, the default input values may be acceptable for the variables the models currently contain. However, it is difficult to comment on the accuracy of the current default values given the interaction between the input values and the platforms.

(2) Poles, Anchors, Guys, Aerial Cable, and Building Attachments

Aliant believes that the default input values for pole costs in the Hatfield model are too low. Based on Aliant's experience, the default input values in the BCPM model are more realistic.

(3) Network Interface Devices

The National Electric Code, par. 800-30, requires that each circuit that can potentially be exposed to electric or power conductors over 300 volts must have a primary protector. This is required regardless of the working status of the pair.

A residential drop is connected to the distribution cable only when service is required, therefore separating the cost of the protector from the Network Interface Device ("NID") and assuming one set of protectors for each line in service is valid.³

Multi-line business terminals are installed in standard sizes and are traditionally spliced into the distribution cable. The National Electric Code requires all circuits terminated in the building terminal to have protection regardless of the number of lines working. The input value for a business NID should therefore reflect the cost of protection for all working and spare incoming lines.

(4) Service Area Interfaces

The cable pairs that are extended into a building and terminated in an indoor Service Area Interface ("SAI"), as stated in the above paragraph (3), will require all the pairs, including spares, to have protection. The cost associated with placing an indoor SAI must include the cost of protecting all incoming pairs terminated at the SAI, and therefore, will be different than the cost of placing a similarly sized outdoor SAI.

III.C.4 Interoffice Trunking, Signaling, Local Tandem Investment

(1) Transport

Aliant's investment related to the fiber optic terminals is substantially higher than the Hatfield model's default (including OC-48s, channel banks, and regenerators). These default prices may not

³ A buried service drop is usually not exposed to voltages over 300 volts, whereas aerial and joint buried distribution cable are exposed to voltages greater than 300 volts.

Aliant Communications Co.

October 17, 1997

Page 7

reflect the entire cost (such as common equipment). Also, smaller companies such as Aliant, may not receive the same volume discounts as larger companies due to the smaller volume of purchases.

Comments on default input values also contained in Sec. III.C.2.g(2) of these comments are also applicable to the default values for transport structures.

(2) Signaling

Aliant considers the STP Link Capacity default and the C-link cross-section defaults too large for Aliant's network. Aliant's costs are substantially higher for signaling equipment such as link terminations. As previously mentioned, Aliant's smaller volume of purchases does not afford it the opportunities for volume discounts that companies which are building and maintaining larger capacity networks are likely to receive.

III.C.5 General Support Facilities

Aliant believes that efforts to "fine tune" General Support Facilities ("GSF") investments and expenses may be difficult to achieve in a practical manner. GSF investment is small relative to network investments. Developing adjustments to ratios based on ARMIS data would be difficult to verify and insure that they are representative of the entire industry.

III.C.7.a Expenses in General

Aliant agrees with the Commission that the models should allow for different expense estimates for small, medium and large companies. All telecommunications providers do not enjoy

Aliant Communications Co.

October 17, 1997

Page 8

the same economies of scale and scope. Aliant also believes that a flexible approach should be adopted which would allow carriers to state expenses on a per line or percent of investment basis, whichever is most appropriate. Aliant believes that the most current ARMIS data is a reasonable estimate of near term forward looking expenses. Introducing more sophistication in forecasting expenses would also introduce more judgment, verification concerns and points of contention.

III.C.7.b Plant Specific Expenses

Aliant believes that Plant Specific Expenses would vary significantly by company across the country due to differences in soil type, climate, and distances. We recommend using ARMIS-derived data and allowing for deviation if an appropriate case can be made by parties to the proceeding.

III.C.7.c Plant Non-Specific Expenses

Aliant believes that Hatfield's assertion that ARMIS-reported expenses reflect excessive staffing at end offices is unfounded, given the reengineering and work force reductions that have taken place in many companies throughout the industry. We believe that deviations from ARMIS should be allowed by company or location if justified by these type of events in the current year.

III.C.7.d Customer Services

Hatfield's exclusion of marketing expense may be appropriate in the costing of UNEs, but it is not appropriate in determining the cost of Universal Service. Basic local service is a retail service, and so retail costs, such as marketing, should be included.

III.C.8 Other

Aliant believes that it is necessary to adjust the estimates of universal service support levels for inflation and technological innovations. However, it may not be feasible to update data for inflation and rerun the cost proxy models frequently to estimate universal support levels, as it is a time consuming and labor intensive process. Therefore, we propose to: (1) update cost proxy models every three years to reflect the implementation of technological innovations and forward-looking costs, and (2) adjust the results for inflation on an annual basis. The models may need to be updated more frequently in the event of a major technological or network change.

III.D. Support Areas

Aliant agrees that the support area to determine universal service support levels and the geographic area used by the selected mechanism to calculate the costs of providing the supported services need not be the same. The geographic unit for determining costs should be sized to an area in which network characteristics and costs are similar (*i.e.*, not a mix of urban (small towns) and rural). These geographic units need to be smaller than the Census Block Groups. The computation

of universal support levels does not require geographic units as small as units used to calculate the costs of the supported services. Aliant believes that support areas should be chosen on the basis of equal local exchange service rates. Costs could be aggregated within support geographic units to determine the appropriate level of support. However, care must be taken to avoid too much aggregation, as aggregation and averaging will almost always produce opportunities for uneconomic arbitrage.

IV. Support For Local Usage

The State of Nebraska requires telecommunications carriers to provide a flat-rated local service. Therefore, prescription of a local usage level that was less than the amount of usage associated with flat-rated service could leave local exchange carriers in Nebraska (and other states with similar requirements) at risk for recovering their costs.

Aliant Communications Co.
October 17, 1997
Page 11

Aliant urges the Commission to adopt the suggestions contained herein.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "A. Shuldiner", with a long horizontal flourish extending to the right.

Robert A. Mazer
Albert Shuldiner
Allison S. Yamamoto
Vinson & Elkins L.L.P.
1455 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-1008
(202) 639-6755
Counsel for Aliant Communications Co.

October 17, 1997

CERTIFICATE OF SERVICE

I hereby certify that a copy of the attached comments of Aliant Communications Co. was served by first class U.S. mail, postage prepaid, on the parties of record in this proceeding.

Amr Shu